





MISSOURI-OSAGE-GASCONADE BASIN

BURTON-DUENKE DAM #4
CAMDEN COUNTY, MISSOURI
NO 31713

AD A

PHASE 1 INSPECTION REPORT NATIONAL DAM SAFETY PROGRAM



United States Army
Corps of Engineers
...Serving the Army
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St. Louis District



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PREPARED BY: U.S. ARMY ENGINEER DISTRICT. ST. LOUIS

FOR: STATE OF MISSOURI



APRIL 1981

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This report was prepared under the National Program of Inspection of		
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respect to safety, based on available data and on visual inspection, to		
determine if the dam poses hazards to human life or property.		
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MISSOURI-OSAGE-GASCONADE BASIN

BURTON-DUENKE DAM #4
CAMDEN COUNTY, MISSOURI
MO 31713

PHASE 1 INSPECTION REPORT NATIONAL DAM SAFETY PROGRAM



St. Louis District

PREPARED BY: U.S. ARMY ENGINEER DISTRICT. ST. LOUIS

FOR: STATE OF MISSOURI

APRIL 1981

DEPARTMENT OF THE ARMY

ST. LOUIS DISTRICT, CORPS OF ENGINEERS
210 TUCKER BOULEVARD, NORTH
ST. LOUIS, MISSOURI 63101

MERLY TO ATTENTION OF

SUBJECT: Dam Phase I Inspection Report

This report presents the results of field inspection and evaluation of the Burton-Duenke Dam #4 (MO 31713).

It was prepared under the National Program of Inspection of Non-Federal Dams.

This dam has been classified as unsafe, non-emergency by the St. Louis District as a result of the application of the following criteria:

- a. Spillway will not pass 50 percent of the Probable Maximum Flood without overtopping the dam.
 - b. Overtopping of the dam could result in failure of the dam.
- c. Dam failure significantly increases the hazard to loss of life downstream.

SUBMITTED BY: _	SIGNED	2 1 JUL 1981
	Chief, Engineering Division	Date
APPROVED BY:		2 1 JUL 1981
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BURTON-DUENKE DAM #4

CAMDEN COUNTY, MISSOURI

MISSOURI INVENTORY NO. 31713

PHASE I INSPECTION REPORT
NATIONAL DAM SAFETY PROGRAM

PREPARED BY:

BLACK & VEATCH CONSULTING ENGINEERS KANSAS CITY, MISSOURI

UNDER DIRECTION OF ST. LOUIS DISTRICT CORPS OF ENGINEERS

FOR

GOVERNOR OF MISSOURI

APRIL 1981

PHASE I REPORT

NATIONAL DAM SAFETY PROGRAM

Name of Dam State Located County Located Stream Date of Inspection Burton-Duenke Dam #4 Missouri Camden County Tributary of the Lake of the Ozarks 24 April 1981

Burton-Duenke Dam #4 was inspected by a team of engineers from Black & Veatch, Consulting Engineers for the St. Louis District, Corps of Engineers. The purpose of the inspection was to make an assessment of the general condition of the dam with respect to safety, based upon available data and visual inspection, in order to determine if the dam poses hazards to human life or property.

The guidelines used in the assessment were furnished by the Department of the Army, Office of the Chief of Engineers and developed with the help of several Federal and state agencies, professional engineering organizations, and private engineers. Based on these guidelines, this dam is classified as an intermediate size dam with a high downstream hazard potential. According to the St. Louis District, Corps of Engineers, failure would threaten lives and property. The estimated damage zone extends approximately one mile downstream to the Lake of the Ozarks. Within the estimated damage zone are a marina, two dwellings, and thirteen trailers. Contents of the estimated downstream damage zone were verified by the inspection team.

The probable maximum flood. The spillway will pass the probable maximum flood recommended by the guidelines is the probable maximum flood. The spillway will pass the flood which has a one percent chance of occurrence in any given year (100-year flood). The spillway design flood recommended by the guidelines is the probable maximum flood. The probable maximum flood is defined as the flood discharge which may be expected from the most severe combination of critical meteorologic and hydrologic conditions which are reasonably possible in the region.

Based on visual observations, this dam appears to be in good condition. Deficiencies visually observed by the inspection team were seepage at the interface of the left abutment and the downstream slope, below the inlet of the spillway pipe, and on both abutments at the upstream enbankment slope, erosion on the upstream and downstream slopes, at the

embankment/abutment interfaces at each of the corners of the embankment, and below the inlet of the spillway pipe, and the very thin vegetal cover. Seepage and stability analyses required by the guidelines were not available.

There were no observed deficiencies or conditions existing at the time of the inspection which indicated an immediate safety hazard. Future corrective action and regular maintenance will be required to correct or control the described deficiencies. In addition, detailed seepage and stability analyses of the existing dam, as required by the guidelines, should be performed. A detailed report discussing each of these deficiencies is attached.

Edwin R. Burton, PE Missouri E-10137

Harry L. Callahan, Partner

Black & Veatch



PHASE I INSPECTION REPORT NATIONAL DAM SAFETY PROGRAM BURTON-DUENKE DAM #4

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SECTION 1 - PROJECT INFORMATION

1.1 GENERAL

- a. Authority. The National Dam Inspection Act, Public Law 92-367, authorized the Secretary of the Army, through the Corps of Engineers, to initiate a program of safety inspection of dams throughout the United States. Pursuant to the above, the District Engineer of the St. Louis District, Corps of Engineers, directed that a safety inspection of the Burton-Duenke Dam #4 be made.
- b. <u>Purpose of Inspection</u>. The purpose of the inspection was to make an assessment of the general condition of the dam with respect to safety, based upon available data and visual inspection, in order to determine if the dam poses hazards to human life or property.
- c. Evaluation Criteria. Criteria used to evaluate the dam were furnished by the Department of the Army, Office of the Chief of Engineers, in "Recommended Guidelines for Safety Inspection of Dams." These guidelines were developed with the help of several Federal agencies and many state agencies, professional engineering organizations, and private engineers.

1.2 DESCRIPTION OF PROJECT

a. Description of Dam and Appurtenances.

- (1) The dam is an earth structure located in the valley of a tributary to the Lake of the Ozarks (see Plate 1). The watershed is an area of steep hills consisting of about 80 percent timber, 15 percent grassland on a golf course fairway and 5 percent urban. The lake would back up to near the toe of an upstream dam when the water surface is at the spillway level. The dam is approximately 380 feet long along the crest and 44 feet high. The dam crest is 40 feet wide. The downstream face of the dam has a nonuniform slope from the crest to the valley floor below.
- (2) The spillway is an uncontrolled 36-inch corrugated metal pipe installed in the embankment. The spillway has a concrete headwall at the upstream end. The pipe acts as an orifice. Flow through the pipe discharges into a ditch and then to the hillside downstream of the left abutment. There is no emergency spillway.
 - (3) Pertinent physical data are given in paragraph 1.3.
- b. Location. The dam is located in northeast Camden County, Missouri, as indicated on Plate 1. The lake formed by the dam is in an

area shown on the United States Geological Survey 7.5 minute series quadrangle map for Lake Ozark, Missouri in Section 8 of T39N, R16W.

- c. Size Classification. Criteria for determining the size classification of dams and impoundments are presented in the guidelines referenced in paragraph 1.1c above. Based on these criteria, the Burton-Duenke Dam #4, which is 44 feet high and has a normal storage capacity of 118 acre-feet, is in the intermediate size category. An intermediate size dam is classified as having a height less than 100 feet, but greater than or equal to 40 feet and/or a storage capacity less than 50,000 acre-feet, but greater than or equal to 1,000 acre-feet.
- d. <u>Hazard Classification</u>. The hazard classification assigned by the Corps of Engineers for this dam is as follows: Burton-Duenke Dam #4 has a high hazard potential, meaning that the dam is located where failure may cause loss of life, and serious damage to homes, agricultural, industrial and commercial facilities, and to important public utilities, main highways, or railroads. For the Burton-Duenke Dam #4 the estimated flood damage zone extends approximately one mile downstream to the Lake of the Ozarks. Within the estimated damage zone are a marina, two dwellings, and thirteen trailers. Contents of the estimated downstream damage zone were verified by the inspection team.
- e. Ownership. The dam is owned by the Burton-Duenke Development Company, P. O. Box 213-32, Osage Beach, Missouri 65065, c/o Mr. Westhoff.
- f. $\underline{\text{Purpose of Dam}}$. The dam forms a 9.7-acre lake used for recreation.
- g. <u>Design and Construction History</u>. Data relating to the design and construction were not available. The owner's representative, Mr. Westhoff, stated that the dam was designed by Mr. Dave Krehbiel and was constructed in the summer of 1979.
- h. <u>Normal Operating Procedure</u>. Normal rainfall, runoff, transpiration, evaporation, and overflow through the uncontrolled spillway all combine to maintain a relatively stable water surface elevation. The lake was considerably below normal pool at the time of the inspection

1.3 PERTINENT DATA

- a. <u>Drainage Area</u> 134 acres (includes 75 acres above two upstream reservoirs)
 - b. Discharge at Damsite.
- (1) Normal discharge at the damsite is through an uncontrolled 36-inch corrugated metal pipe.

- (2) Estimated experienced maximum flood at damsite Unknown.
- (3) Estimated ungated spillway capacity at maximum pool elevation elevation-80 cfs (Probable Maximum Flood Pool El. 717.4)
 - c. Elevation (Feet above m.s.l. Approximate Tie to USGS Map).
 - (1) Top of dam 714.4 (see Plate 3)
 - (2) Spillway outlet invert 707.0
 - (3) Streambed at toe of dam 670.5
 - (4) Maximum tailwater Unknown.
 - d. Reservoir.
- (1) Length of maximum pool 1,800 feet \pm (Probable maximum flood pool level)
 - (2) Length of normal pool 1,600 feet ± (Spillway outlet invert)
 - e. Storage (Acre-feet).
 - (1) Top of dam 200
 - (2) Spillway outlet invert 118
 - (3) Design surcharge Not available.
 - f. Reservoir Surface (Acres).
 - (1) Top of dam 12.8
 - (2) Spillway outlet invert 9.7
 - g. Dam.
 - (1) Type Earth embankment.
 - (2) Length 380 feet
 - (3) Height 44 feet +
 - (4) Top width 40 feet
- (5) Side slopes upstream face $1.0~\rm V$ on $2.6~\rm H$, downstream face between $1.0~\rm V$ on $3.4~\rm H$ and $1.0~\rm V$ on $4.2~\rm H$ (see Plate 4).

- (6) Zoning Unknown.
- (7) Impervious core Unknown.
- (8) Cutoff Unknown.
- (9) Grout curtain Unknown.
- h. <u>Diversion and Regulating Tunnel</u> None.
- i. Spillway.
- (1) Type 36-inch corrugated metal pipe.
- (2) Inlet invert elevation 705.0 feet m.s.l.
- (3) Outlet invert elevation 707.0 feet m.s.l.
- (4) Gates None.
- (5) Upstream channel The normal pool would back up to near the toe of an upstream dam.
- (6) Downstream channel Discharges to a ditch and then to the hillside.
 - j. Emergency Spillway None.
 - k. Regulating Outlets None.

SECTION 2 - ENGINEERING DATA

2.1 DESIGN

Design data were not available.

2.2 CONSTRUCTION

Construction records were unavailable; however, the owner's representative stated that the dam was designed by Mr. Dave Krehbeil and was constructed in the summer of 1979.

2.3 OPERATION

Operational records and documentation of past floods were unavailable.

2.4 GEOLOGY

The site of the dam and reservoir is located in a narrow, steepsided valley in hilly terrain. The dam impounds a small intermittent side tributary of the Osage River which is dammed to form the Lake of the Ozarks.

The soils in the area of the dam and reservoir consist of the Lebanon, Doniphan, Gepp, Bardley and Clarksville soil series. The Lebanon soils are formed in loess overlying residuum weathered from cherty limestone or dolomite on ridgetops and upper side slopes. For engineering purposes, the soils are classified as CL material. The Doniphan soils are formed in residuum weathered from clayey shales and cherty dolomite on ridgetops and side slopes. For engineering purposes, the soils are classified as CL, CH, MH, GM, or SM-SC materials. The Gepp, Bardley and Clarksville soils are developed in residuum weathered from cherty dolomite. For engineering purposes, the soils are classified as GC, GM, SC, SM, ML, CL or CH materials depending on location of the samples.

The bedrock in the area of the dam and reservoir consists of dolomite with abundant chert of the Gasconade formation of the Canadian Series of the Ordovician System. The Gasconade formation forms nearly vertical bluffs and cliffs along streams in the central Ozarks and caves and springs are common.

2.5 EVALUATION

- a. Availability. No engineering data were available.
- b. Adequacy. No engineering data were available. Thus, an assessment of the design, construction, and operation could not be made.

Seepage and stability analyses comparable to the requirements of the "Recommended Guidelines for Safety Inspection of Dams" were not available, which is considered a deficiency. These seepage and stability analyses should be performed for appropriate loading conditions (including earthquake loads) and made a matter of record.

c. <u>Validity</u>. The validity of the design, construction, and operation could not be determined due to the lack of engineering data.

SECTION 3 - VISUAL INSPECTION

3.1 FINDINGS

- a. General. A visual inspection of Burton-Duenke Dam #4 was made on 24 April 1981. The inspection team consisted of Edwin Burton, team leader; Robert Pinker, geologist; Gary Van Riessen, geotechnical engineer; and John Ruhl, hydrologic/hydraulic engineer. Mr. Westhoff and Mr. Krehbiel, representatives of the owner, met the inspection team at the dam and provided information regarding design, construction, and maintenance. The dam appears to be in good condition. Specific observations are discussed below. No observations were made of the condition of the upstream face of the dam below the pool elevation at the time of the inspection.
- b. Dam. The inspection team observed the following conditions at the dam. No cracking, sliding, sloughing, sinkholes, or other signs of settlement or instability were observed. The embankment has a broad crest with a flat downstream slope and a mild upstream slope. No toe drains, relief wells, or instruments to measure the performance of the dam were located.

Minor seepage was occurring at the interface of the left abutment and the downstream slope, below the inlet of the spillway pipe, and on both abutments at the upstream enbankment slope. The area at the interface of the left abutment and the downstream slope was flowing clear at a rate of approximately 5 gallons/hour. Seepage below the spillway pipe and at the upstream/abutment interfaces was less than 5 gallons/hour, was above the lake level and was coming from the abutments. The area downstream of the dam was fairly wet, but because of rain on the day previous to the inspection, it was impossible to determine if this was due to seepage.

Minor erosion of silty clay material has taken place on the upstream and downstream slopes, at the embankment/abutment interfaces at each of the corners of the embankment, and below the inlet of the spillway pipe. There is no evidence to indicate that the embankment has ever been overtopped.

The ground cover on the embankment consists of thin weeds and no grass in rocky soil. There was no riprap on the embankment. There were no animal burrows or trees.

c. Appurtenant Structures. The spillway is the only appurtenant structure observed by the inspection team. The alignment of the spillway pipe was observed to dogleg to the left when viewed from the upstream end. There is a concrete headwall (8 feet wide, 5.5 feet high and 0.6 feet thick) at the pipe inlet. There was no trash rack at the pipe inlet.

There was approximately 2 to 3 inches of sediment in the pipe at the upstream end. About 6 feet and 4 feet of the outside of the pipe was observed at the upstream and downstream ends, respectively. One joint in the pipe was observed and was in good condition with no apparent movement. The survey made during the inspection showed the spillway pipe outlet to be about 2 feet higher than its inlet which appeared to be the way it was constructed. There is no evidence of leakage into, out of, or around the pipe. The pipe appears to be in good condition with no rust observed. The pipe discharges into a ditch which is approximately 3-1/2 feet wide and 2 feet deep. The ditch ends about 75 feet below the pipe outlet where discharge is released to the hillside north of the left abutment. There is no erosion downstream of the pipe outlet.

d. Geology. The soils in the area of the dam and reservoir consist of silty clay with numerous rock fragments ranging in diameter from 1/4 inch to 6 inches. The soil developed from residuum weathered from the underlying dolomite and chert bedrock. The soil is typically less than 5 feet thick.

The bedrock in the area of the dam and reservoir consists of dolomite with abundant chert and a 6 to 10-foot thick sandstone bed. The rocks are classified as the Gasconade formation; the sandstone is the upper portion of the Gunter member of the Gasconade formation.

The upper two-thirds of the abutments at the ends of the embankment consist of dolomite with abundant chert. The lower one-third consists of sandstone. Seepage was observed coming from the sandstone unit where it is exposed on the abutments of the upstream slope at approximately 10 feet above the water in the reservoir. The dolomite is vuggy and contains numerous chert nodules and beds.

Samples of the near-surface materials in the embankments were taken near the center of the downstream crest using an Oakfield sampler.

These materials were classified as silty clay with numerous chert fragments. For engineering purposes, these samples were classified as CL materials. Based on these samples, it is anticipated that the remainder of the embankment is constructed of similar silty clay (CL) material.

- e. Reservoir Area. Minor slumping or sliding of the reservoir right and $\overline{\text{left}}$ banks was observed (Photos 14 and 15). This is probably due to excavation of borrow material from the reservoir and should have no detrimental effects on the dam. The lake was noted to be clear with no noticeable siltation and a visibility of 1-1/2 to 2 feet.
- f. Downstream Channel. The spillway discharges to a ditch and then to the hillside north of the left abutment.

3.2 EVALUATION

The various deficiencies observed at the time of the inspection are not believed to represent an immediate safety hazard. They do, however, warrant monitoring and control.

The seepage should be monitored regularly for quality and quantity. Similar areas of seepage were observed in natural hillsides in the area with no adverse effects. Seepage can cause internal erosion creating cavities and underground channels, thereby weakening the embankment. The erosion gullies should be backfilled with suitable material and compacted. The embankment should be seeded to prevent erosion.

The doglegged alinement and adverse slope of the spillway pipe make it susceptible to clogging from debris hangup inside the pipe and to sediment in the pipe. Realinement of the spillway pipe or constructing an inlet baffle would reduce the potential for clogging.

The lack of good ground cover on the embankment has resulted in minor erosion of the embankment due to seepage and local runoff. The absence of riprap on the upstream face does not appear to be a problem.

SECTION 4 - OPERATIONAL PROCEDURES

4.1 PROCEDURES

The pool is primarily controlled by rainfall, runoff, evaporation, transpiration, seepage, and capacity of the uncontrolled spillway. The lake was considerably below normal pool at the time of the inspection.

4.2 MAINTENANCE OF DAM

There was no evidence of a regular maintenance program. The crest appeared to have been graded within a year prior to the inspection.

4.3 MAINTENANCE OF OPERATING FACILITIES

No operating facilities exist.

4.4 DESCRIPTION OF ANY WARNING SYSTEM IN EFFECT

There is no existing warning system or preplanned scheme for alerting downstream residents for this dam.

4.5 EVALUATION

A maintenance program should be established to include seeding the embankment with grass, mowing the grass and weed cover on the embankment when it is developed, and removal of any trees that appear.

SECTION 5 - HYDRAULIC/HYDROLOGIC

5.1 EVALUATION OF FEATURES

- a. Design Data. No design data were available.
- b. Experience Data. The drainage area and lake surface area are developed from the \overline{USGS} Lake Ozark Quadrangle Map. The dam layout is from a survey made during the inspection.

c. Visual Observations.

- (1) The spillway appears to be in good condition. The lake level at the time of the inspection (El. 698.0) was below the spillway outlet invert. There were no obstructions to flow in the downstream channel. There was approximately 2 to 3 inches of sediment in the pipe at the upstream end.
 - (2) There is no emergency spillway for this dam.
 - (3) Spillway discharges do not endanger the integrity of the dam.
- d. Overtopping Potential. The spillway will not pass the probable maximum flood without overtopping the dam. The probable maximum flood is defined as the flood discharge that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the region. The spillway will pass 20 percent of the probable maximum flood without overtopping the dam. The spillway will pass the one percent chance flood estimated to have a peak outflow of 15 cfs developed by a 24-hour, one percent chance rainfall. According to the recommended guidelines from the Department of the Army, Office of the Chief of Engineers, a high hazard dam of intermediate size should pass the probable maximum flood. The portion of the estimated peak discharge of 50 percent of the probable maximum flood overtopping the dam would be 2,180 cfs of the total discharge from the reservoir of 2,260 cfs. The estimated duration of overtopping is 5.8 hours with a maximum height of 2.8 feet. The portion of the estimated peak discharge of the probable maximum flood overtopping the dam would be 2,540 cfs of the total discharge from the reservoir of 2,620 cfs. The estimated duration of overtopping is 8.8 hours with a maximum height of 3.0 feet. The embankment could be jeopardized should overtopping occur for these periods of time.

According to the St. Louis District, Corps of Engineers, the effect from rupture of the dam could extend approximately one mile downstream to the Lake of the Ozarks. A marina, two dwellings, and thirteen trailers could be severely damaged and lives could be lost should failure of the dam occur. Contents of the estimated downstream damage zone were verified

by the inspection team. There does not appear to be any flood plain regulations or other constraints in force to limit future downstream development.

SECTION 6 - STRUCTURAL STABILITY

6.1 EVALUATION OF STRUCTURAL STABILITY

- a. <u>Visual Observations</u>. Visual observations of conditions which affect the structural stability of this dam are discussed in Section 3, paragraph 3.1b.
- b. <u>Design and Construction Data</u>. No design data relating to the structural stability of the dam were found. Seepage and stability analyses comparable to the requirements of the "Recommended Guidelines for Safety Inspection of Dams" were not available, which is considered a deficiency.
 - c. Operating Records. No operational records exist.
- d. <u>Postconstruction Changes</u>. The only postconstruction change which was observed is the grading on the crest. It appeared that this repair had been made within the past year.
- e. Seismic Stability. The dam is located in Seismic Zone l which is a zone of minor seismic risk. A properly designed and constructed earth dam using sound engineering principles and conservatism should pose no serious stability problems during earthquakes in this zone. The seismic stability of an earth dam is dependent upon a number of factors: embankment and foundation material classifications and shear strengths; abutment materials, conditions, and strengths; embankment zoning; and embankment geometry. Adequate descriptions of embankment design parameters, foundation and abutment conditions, or static stability analyses to assess the seismic stability of this embankment were not available and therefore no inferences will be made regarding the seismic stability. An assessment of the seismic stability should be included as part of the stability analysis required by the guidelines.

SECTION 7 - ASSESSMENT/REMEDIAL MEASURES

7.1 DAM ASSESSMENT

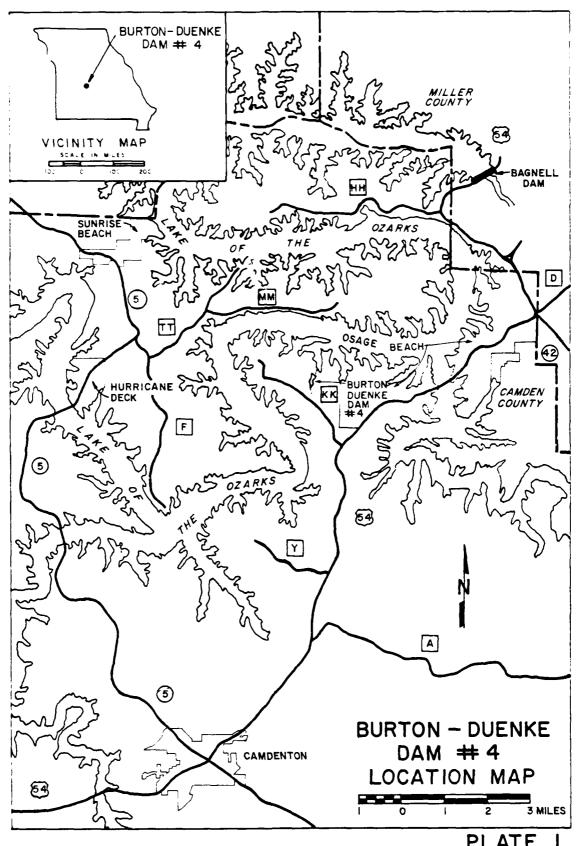
- a. <u>Safety</u>. Several conditions observed during the visual inspection by the inspection team should be monitored and/or controlled. There is seepage at the interface of the left abutment and the downstream slope, below the inlet of the spillway pipe, and on both abutments at the upstream embankment slope, erosion on the upstream and downstream slopes, at the embankment/abutment interfaces at each of the corners of the embankment, and below the inlet of the spillway pipe, and a very thin vegetal cover. Seepage and stability analyses comparable to the requirements of the "Recommended Guidelines for Safety Inspection of Dams" were not available, which is considered a deficiency.
- b. Adequacy of Information. Due to the absence of engineering design data, the conclusions in this report were based only on performance history and visual conditions. The inspection team considers that these data are sufficient to support the conclusions herein. Seepage and stability analyses comparable to the requirements of the "Recommended Guidelines for Safety Inspection of Dams" were not available, which is considered a deficiency.
- c. <u>Urgency</u>. It is the opinion of the inspection team that a program should be developed as soon as possible to implement remedial measures recommended in paragraph 7.2b. If the safety deficiencies listed in paragraph 7.1a are not corrected, they will continue to deteriorate and lead to a serious potential of failure. The item recommended in paragraph 7.2a should be pursued on a high priority basis.
- d. Necessity for Phase II. The Phase I investigation does not raise any serious questions relating to the safety of the dam nor does it identify any serious dangers which would require a Phase II investigation. However, the additional analyses noted in paragraph 2.5b are necessary for compliance with the guidelines.
- e. Seismic Stability. This dam is located in Seismic Zone l. Adequate description of embankment design parameters, foundation and abutment conditions, or static stability analyses to assess the seismic stability of this embankment were not available and therefore no inferences will be made regarding the seismic stability. An assessment of the seismic stability should be included as part of the recommended stability analysis.

7.2 REMEDIAL MEASURES

a. Alternatives. The spillway capacity and/or storage volume would need to be increased or the lake level would need to be permanently lowered to increase available flood storage in order to effectively pass

the recommended spillway design flood. Spillway capacity could be increased by providing an emergency spillway. The storage volume could be increased by raising the low areas of the dam crest.

- b. Operation and Maintenance Procedures. The following operation and maintenance procedures are recommended and should be carried out under the direction of a professional engineer experienced in the design, construction, and maintenance of earth dams.
- (1) The seepage areas noted during the visual inspection should be closely monitored and documented as to quantity of flow. Any significant changes should be evaluated.
- (2) The erosion gullies should be backfilled with suitable material and compacted.
- (3) A debris baffel or a trash rack should be constructed at the spillway pipe inlet or the pipe should be realined to a straight alinement to prevent clogging.
- (4) A maintenance program to control the future growth of trees on the embankment should be developed. The embankment should be seeded with grass and developed for erosion protection. Grass/weed cover on the embankment should be cut periodically after it has been developed.
 - (5) Seepage and stability analyses should be performed.
- (6) A detailed inspection of the dam should be made periodically. The findings of this inspection should be documented and made a matter of record. More frequent inspections may be required if additional deficiencies are observed or the severity of the reported deficiencies increase.



PLATE

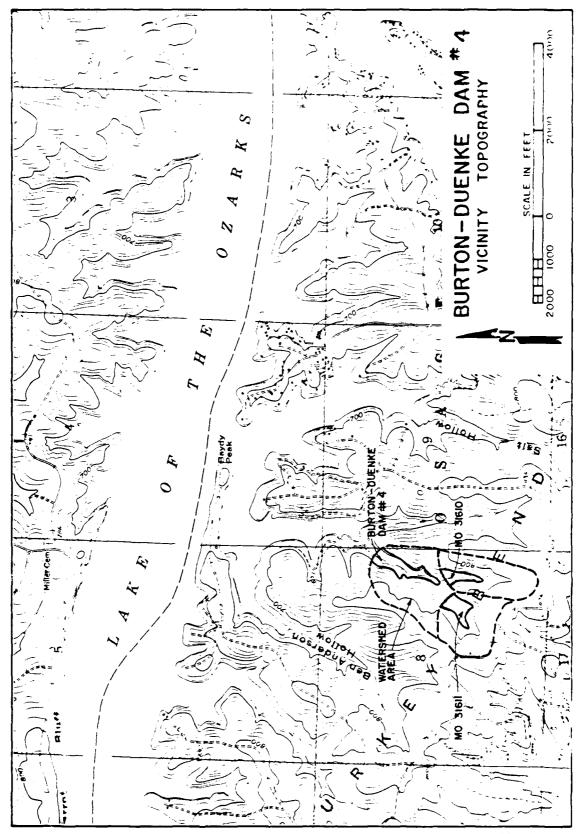
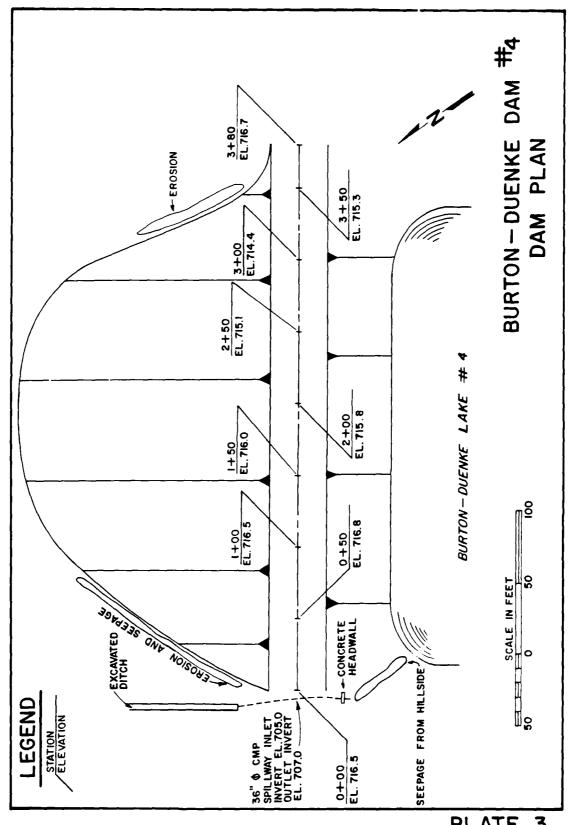


PLATE 2



3 PLATE

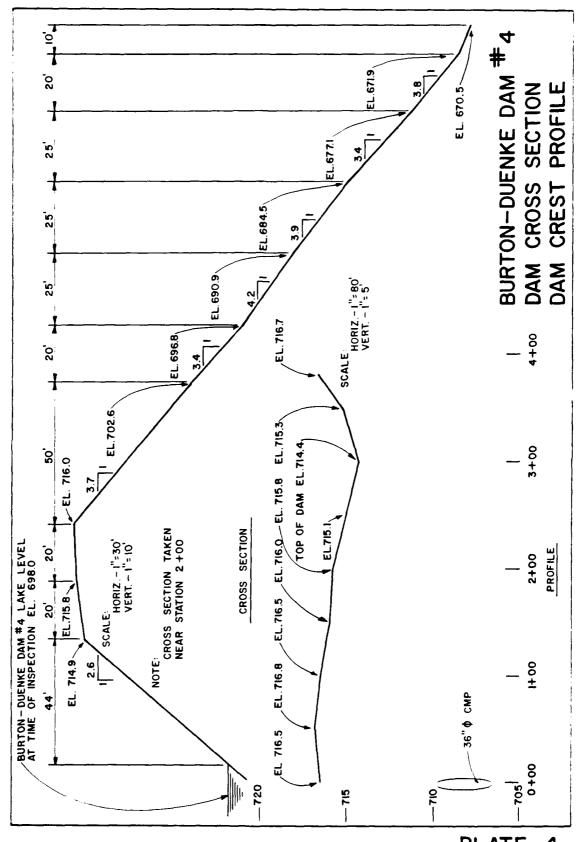


PLATE 4

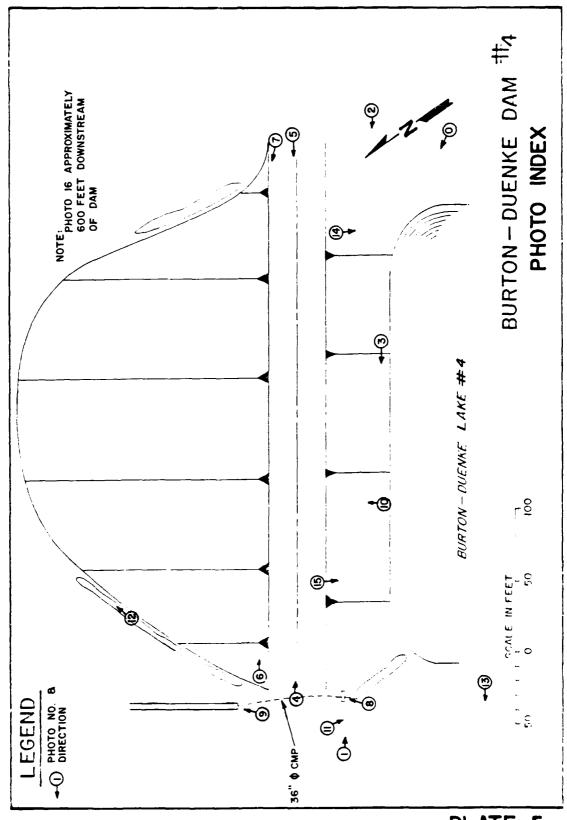


PLATE 5

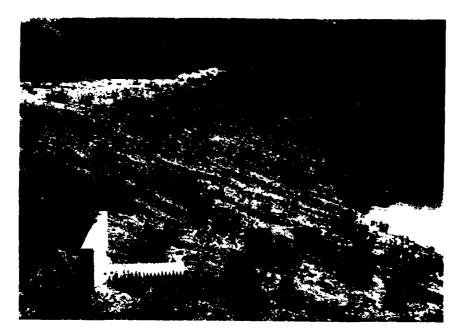


PHOTO I: UPSTREAM FACE OF DAM LGOKING EAST



PHORO 2: UPSTREAM FACE OF DAM LOOKING WEST



PHOTO 3 : UPSTREAM FACE OF DAM AT WATERLINE



PHOTO 4: CREST OF DAM LOOKING EAST



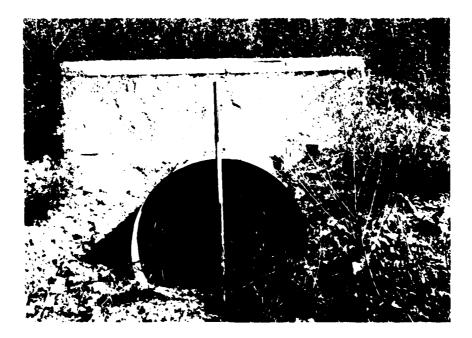
 $\text{CRC}_{\text{FO}} \approx 1.00 \text{ kHz}$ of DAM LOOKING WEST



PHOTO 6: DOWNSTREAM PACE OF DAM LOOKING LAST



PHOTO 7 : DOWNSTREAM FACE OF DAM LOOKING WEST



CHOLO S : SPILLMAY PIPE INLET



PHOTO 9 : CHANNEL DOWNSTREAM OF SPILLWAY PIPE OUTLET



PHCTO 10: FROSION ON UPSTREAM FACE OF DAM



(1801) II: EROSION AT UPSTREAM FACE AND LEFT ABUTMENT



PHOTO 12: EROSION AT DOWNSTREAM FACE AND LEFT ABUTMENT



PHOTO IB: LEFT ABUTMENT JUST UPSTREAM OF DAM



PHOTO 14: RIGHT BANK OF RESERVOIR



PHOTO 15: LAKE AND WATERSHED VIEWED FROM DAM



PHO O 16: VALUEY DOWNSTREAM OF DAM

APPENDIX A
HYDROLOGIC AND HYDRAULIC ANALYSES

HYDROLOGIC AND HYDRAULIC ANALYSES

To determine the overtopping potential of Burton-Duenke Dam #4, flood routings were performed by applying the Probable Maximum Precipitation (PMP) to a synthetic unit hydrograph to develop inflow hydrographs for the reservoirs being studied and the upstream reservoirs. The inflow hydrographs were then routed through the reservoirs and spillways. The overtopping analysis was determined using the computer program HEC-1 (Dam Safety Version) (1).

The PMP was determined from regional charts prepared by the National Weather Service in "Hydrometeorological Report No. 33" (HMR-33) (2). Reduction factors were not applied. The rainfall distribution for the 24-hour PMP storm was determined according to the procedures outlined in HMR-33 and EM 1110-2-1411 (3). The Jefferson City, Missouri rainfall distribution (5 min. interval - 24 hours duration), as provided by the St. Louis District, Corp of Engineers, was used when the one percent chance probability flood was routed through the reservoirs and spillways.

The synthetic unit hydrograph for the watershed was developed by the computer program using the Soil Conservation Service (SCS) method (1 and 4). The parameters for the unit hydrographs are shown in Table 1. The time of concentration $(T_{\ })$ for the reservoir being studied was determined using the Kirpich method and was verified by the SCS method (4 and 5).

The SCS curve number (CN) method was used in computing the infiltration losses for the rainfall-runoff relationship. The CN values used, and the result from the computer output, are shown in Table 2.

Two impoundments in the watershed of Burton-Duenke Dam #4 were included in the hydrologic and hydraulic analyses. Storms were routed through these lakes (see Plate 2) which shall be referenced as "Dam #1" and "Dam #2" through the remainder of this appendix. Input data for the analysis of each of these dams was assumed from previous reports on these structures (6 and 7).

Routing through the reseroirs was performed using the Modified Puls Method. The initial reservoir pool elevations for the routing of each storm were determined to be equivalent to the inlet or outlet invert elevations of the spillways in accordance with antecedent storm conditions preceding the one percent probability and probable maximum storms outlined by the U.S. Army Corps of Engineers, St. Louis District (8). The hydraulic capacity of the spillways and the storage capacity of the reservoir were defined by the elevation, surface area, storage, and discharge relationships shown in Table 3.

The flow over the crest of the dams was determined using the non-level dam crest option (L and V cards) of the HEC-l program. The

program assumes critical flow over a broad-crested weir. The flow through the spillways was determined from Hydraulic Charts for the Selection of Highway Culverts (9).

Where routing through the upstream reservoirs resulted in overtopping of those structures, a breach analysis was performed using HEC-1. The breaching parameters are noted in Table 4.

The result of the routing analysis indicates that the spillway under study will pass a flood equivalent to 20 percent of the PMF without overtopping the dam.

A summary of the routing analysis for different ratios of the PMF is shown in Table $5\,\cdot$

The computer input data and a summary of the output data are presented at the back of this appendix.

TABLE 1
SYNTHETIC UNIT HYDROGRAPH

<u>Parameters</u> :	Dam #4	<u>Dam #1</u>	Dam #2
Drainage Area (A)	134 acres	40 acres	35 acres
Length of Longest Watercourse (L)	0.26 miles	0.25 miles	0.13 miles
Elevation Difference in Watershed (H)	118 feet	107 feet	81 feet
Lag Time (L_g)	0.05 hours	0.05 hours	0.03 hours
Time of concentra- tion (T _c)	0.09 hours	0.09 hours	0.05 hours
Duration (D)	0.7 min. (use 5 minutes	0.7 min. in each case)	0.4 min.

Time (Min.) *	Dam #4	harge (cfs) Dam #1)
. 0	0	0	0
5	476	326	316
10	182	125	89
15	42	29	17
20	10	7	3
25	2	1	0
30	0	0	

^{*} From HEC-1 computer output

FORMULAS USED:

$$T_c = (11.9 \times L^3/H)^{.385}$$
 (5)
 $L_g = 0.6 T_c$
 $D = 0.133 T_c$

TABLE 2 RAINFALL-RUNOFF VALUES

Selected Storm Event	Storm Duration (Hours)	Rainfall (Inches)	Runoff (Inches)	Loss (Inches)
PMP				
Dam #4	24	33.41	30.75	2.66
Dam #1	24	33.41	30.56	2.85
Dam #2	24	33.41	30.63	2.78
50% PMP				
Dam #4	24	17.91	15.38	2.53
Dam #1	24	18.28	15.28	3.00
Dam #2	24	18.31	15.31	3.00
1% Probability				
Dam #4	24	7.44	3.34	4.10
Dam #1	24	7.44	3.37	4.07
Dam #2	24	7.44	3.46	3.98

Additional Data:

- 1) The soil associations in this watershed are Gebb, Bardley, Clarksville, Lebanon, and Doniphan (10).
 - 51 percent of total drainage area in hydrologic soil group B.
 - 49 preent of total drainage area in hydrologic soil group C.
 - 80 percent of the land use was timberland
 - 15 percent of the land use was grassland
 - 5 percent of the land use was urban (4 and 11)
- SCS Runoff Curve CN (AMC III) for ratios of the PMF:
 - 81 Dam #4
 - 78 Dam #1
 - 78 Dam #2
- 3) SCS Runoff Curve CN (AMC II) for the one percent probability flood:

 - 64 Dam #4 60 Dam #1 60 Dam #2

TABLE 3

ELEVATION, SURFACE AREA, STORAGE, AND DISCHARGE RELATIONSHIPS

Elevation (feet-MSL)	Lake Surface Area (acres)	Lake Storage (acre-ft)	Spillway Discharge (cfs)
Dam #4			
*707.0	9.7	118	0
709.5	10.7	143	24
712.0	11.8	170	53
***714.4	12.8	200	66
Dam #1			
**748.4	3.7	42	0
750.0	3.9	48	10
***751.3	4.2	53	24
Dam #2			
**773.6	4.0	55	0
775.0	4.2	61	7
***777.1	4.5	70	20

*Spillway outlet invert elevation
**Spillway inlet invert elevation
***Top of dam elevation

The relationships in Table 3 were developed from the Lake Ozark, Missouri 7.5 minute quadrangle map and the field measurements.

METHOD USED

Spillway releases were determined by nomographs for corrugated metal pipe culverts with inlet and outlet control (9),

TABLE 4
BREACHING PARAMETERS

	<u>Dam #1</u>	Dam #2
Bottom Width of Breach (BRWID)	10 feet	10 feet
Side Slope of Breach (Z) (In feet horizontal to 1.0 foot vertical)	0.5 feet	0.5 feet
Elevation of Breach Bottom at Maximum Size of Breach (ELBM)	724.7 ft. m.s.l.	735.4 ft. m.s.l.
Time for Breach to Develop to Maximum Size (TFAIL)	1.0 hour	1.0 hour
Elevation of Water Surface Which Will Cause Dam to Fail (FAILEL)	751.3 ft. m.s.l.	777.1 ft. m.s.l.

TABLE 5

RESULTS OF FLOOD ROUTINGS

Ratio of PMF	Peak Inflow (CFS)	Peak Lake Elevation (FTMSL)	Total Storage (ACFT.)	Peak Outflow (CFS)	Depth (FT.) Over Top of Dam	Duration (HR.) Of Overtopping
-	0	*707.0	118	0	-	-
0.20	1,120	714.3	198	65	0	0
0.50	2,410	717.2	237	^.260	2.8	5.8
1.00	3,200	717.4	239	2,620	3.0	8.8

^{*} Spillway outlet invert elevation

BIBLIOGRAPHY

- (1) U.S. Army Corps of Engineers, Hydrologic Engineering Center, Flood Hydrograph Package (HEC-1), Dam Safety Version, July 1978, Davis, California.
- (2) HMR-33, Seasonal Variations of Probable Maximum Precipitation, East of the 105th Meridian for Areas 10 to 1,000 Square Miles and Durations from 6 to 48 Hours, U.S. Department of Commerce, NOAA, National Weather Service, 1956.
- (3) EM-1110-2-1411, Standard Project Flood Determinations, U.S. Army Corps of Engineers, 26 March 1952.
- (4) U.S. Department of Agriculture, Soil Conservation Service, National Engineering Handbook, Section 4, Hydrology, August 1972.
- (5) U.S. Department of the Interior, Bureau of Reclamation, <u>Design of Small Dams</u>, 1974, Washington, D.C.
- (6) U.S. Army Corps of Engineers, St. Louis District, Burton Duenke #1 Lake Dam, Phase I Inspection Report, August 1980.
- (7) U.S. Army Corps of Engineers, St. Louis District, <u>Burton Duenke #2</u> Lake Dam, Phase I Inspection Report, July 1980.
- (8) U.S. Army Corps of Engineers, St. Louis District, <u>Hydrologic</u>/ <u>Hydraulic Standards</u>, Phase I Safety Inspection of Non-Federal Dams, <u>12 December 1979</u>.
- (9) U.S. Department of Commerce, Bureau of Public Roads, Hydraulic Engineering Circular No. 5, <u>Hydraulic Charts for the Selection of Highway Culverts</u>, December 1965.
- (10) U.S. Department of Agriculture, Soil Conservation Service, Preliminary Soils Report for Camden County, Missouri.
- (11) U.S. Department of Agriculture, Soil Conservation Service, Technical Release No. 55, <u>Urban Hydrology for Small Watersheds</u>, January 1975.
- (12) Mary H. McCracken, Missouri Division of Geological Survey, Geologic Map of Missouri, 1961.
- (13) John W. Koenig, Missouri Division of Geological Survey, <u>The Strati</u>graphic Succession in Missouri, 1961.

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	FLOOD HYDROGRAPH PACKAGE - MEC-1						PROGRA	PROGRAM M21/02-2V TIME	TIME	18:02:25	CASE 84
	AC-FT THOUS CU R		÷ ÷	÷	::		::				
		RVOROGRAPH	AT STA	404	PLAH 1, R110 2	~					
	CFS CRS INCHES AC-FT THOUS CU IN	₽₽₽₽ 226. 6.	6-HOUR 35. 1. 5.10 129.66 17.	24-HOUR 11. 16.53 16.53 22. 27.	72-H0UR 11. 6.53 165.90 22. 27.	T0TAL V	VOLUME 3185. 3185. 6.53 165.90 22.				
	i i	HYDROGRAPH	AT STA	1 108	PLAM * RTIO	0					
	CFS CMS INCHES AND ACET TROUS CU THE TROUS C		4 6 40 6 40 6 40 6 40 6 40 6 40 6 40 6	26-HOUR 14. 0 0. 207. 36. 37.	72-HOUR 14. 16. 8.16 207.38 34.	T07AL V	VOLUME 3981* 113* 8.16 207*38 27*				
		ĤYDROGRAPH		401	PLAN 1. RTJ0	7 0					
	CFS CMS INCHES MA AC-FT THOUS CU R	H 900 900 900 900 900 900 900 900 900 90			72-H0UP 17-H0UP 10-90 248.85 73-41.	10 TAL	40kUME 4777* 135* 9*80 248*85 44*				•
		HTDROGRAPH	≪		PLAN 1. RTIO	<u>د</u>					
	CFS CRS INCHES AC-FT AC-FT	968. 11.	6-HOUR 61. 20.93 226.91 37.	24-HOUR 1 19- 290-33 28- 47-	72-Hour 19. 11.43 290.33 47.	TOTAL V	290.33 280.33 290.33 47.				
	* * * * * * * * * * * * * * * * * * * *	HTDROGRAPH	AT STA	1 101	1 FOR PLAN 1, RIIO	9 0		•			
,		9 4 8	# 0 0 H - 9	24-HOUR	72-HOUR	T07AL V	VOLUME				
	A T C 3						PROJECT	94571	A 25	12 MAY 81	PAGE 10
FLOOD NYBROGRAPH PACKAGE	- HEC-1		l I	:	:		PROGRAM	H21/02-2V	114	18:02:25	70 38 V3
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TRES ISARE	O O O O O	750.00 751.00 751.30	20.00	18. 42. 48.	740. 748. 750.	120 COGH EXPE ELEVI-	TOPEL COSD FXI	180. 305. 330. 751.6 751.7 752.1	DAN BREACH 2 ELBH -50 724.70	Hours	HOURS	1	HOURS		HOURS	HOURS		HOURS	:	
000000000000000000000000000000000000000	NATION IN COLUMN TO THE COLUMN	00-67	4.00	CAPACITY= 0. 4.	ELEVATION= 722. 730.	CREL SPUID 748.4 .0		CREST LEMETH 0° 85° AT OR PELOV 751°3 751°4	,	PEAN OUTTLOW IS 11. AT TIME 16.08 P	BEGIN DAM FAILURE AT 15.92 HOURS Peak outflow 1s 1062. At time 16.69 Hours	BEGIN DAM FAILURE AT 15.67 HOURS	PEAK OUTFLOW IS 1083. AT TIME 16.44 HOURS	BEGIN DAM FAILURE AT 15.50 HOURS		BEGIN DAM FAILURE AT 15.33 HOURS PEAK OUTGLOW 15 1157. AT TIME 16.04 HOURS	. SAU	PEAR OUTFLOW IS 1132. AT TIME 15.65 HOURS		

TITLOW IS 1122. AT THE 14.96 MOURS AND FALLUME AT 13.17 MOURS AND FALLUME AT 13.27 MOURS TITLOW IS 112.58 MOURS TO 25.70 102.00 125.00 125.00 125.00 126.00	FLOOD HYDROGRAPH PACKAGE - NEC-1	PROGRAM N	PROGRAM H21/02-2V	PROGRAM W21/02-2V TIME 18:02:25 CASE #	CASE #4
E 13.96 HOURS E 13.57 HOURS SUB-AREA RUNOFF CO-PUTATION SUB-AREA RUNOFF CO-PUTATION SUB-AREA RUNOFF CO-PUTATION SUB-AREA RUNOFF CO-PUTATION STATE SOC	BEGIN DAM FAILURE AT 14.17 HOURS				
E 13.37 HOURS SUB-AREA RUHOFF CO-PUTATION ISTAG	1122. AT TIME				
E 13.96 HOURS E 13.37 HOURS SUB-REA RUNGIF COPPUTATION FIOU HYDROGRAPH TO DAM #2 SUB-REA RUNGIF COPPUTATION FIOU HYDROGRAPH TO TO THE TO	BEEIN DAM FAILURE AT 13.17 HOURS	: :			
E 13.37 HOURS SUB-AREA RUNOIT COMPUTATION FLOW HYDROGRAPH TO DAR #2 ISTAG ICOMP IECOM TIAPE JELT JPRT INAME ISTAGE IAUTO SOCIETAREA SHAP TROOK A TROPE FOR THE STAGE IAUTO CONTRICT RILOL ERAIN STRES RATE OF TROOK STRIL CHSTL ALSHX RIIMP CONTRICT RILOL ERAIN STRES RILOK STRIL CHSTL ALSHX RIIMP CONTRICT RILOL ERAIN STRES RILOK STRIL CHSTL ALSHX RIIMP CONTRICT RILOL ERAIN STRES RILOK STRIL CHSTL ALSHX RIIMP CONTRICT RILOL ERAIN STRES RILOK STRIL CHSTL ALSHX RIIMP CONTRICT RILOL ERAIN STRES RILOK STRIL CHSTL ALSHX RIIMP CONTRICT RILOR OF PERIOD FILM RILOR STRICT CONTRICT CONT	1138. AT TIME	!			
SUB-AREA BUNGOF COMPUTATION CALCULATE INFLOW HTDROGRAPH TO DAM F2 INTOG 1 UNG TAREA SHAP TROOP	BEGIN DAN FAILURE AT 12.58 HOURS	1	1		
SUB-AREA RUNOFF CO-PUTATION CALCULATE INFICON WIDDOGRAPH TO DARM #2 ISTAG ICOPP IECON ITAPE JPLT JPRT INAME ISTAGE IAUTO SPEE PMS Rd PREZIP PATA SPEE PMS Rd PREZIP PATA SPEE PMS Rd PREZIP PATA CURVE NO - 25.70 102.00 120.00 130.00 .00 .00 .00 .00 CURVE NO78.00 WETMESS1.00 EFFECT CM - 78.00 CURVE NO78.00 WETMESS1.00 EFFECT CM - 78.00 ITAME INCREMENT TOO LANGE-CHAIN IS GI LAG/27 UNIT HTDOGRAPH DATA THE INCREMENT TOO LANGE-CHAIN IS GI LAG/27 UNIT HTDOGRAPH SERIOR DEPARTOR FLOW. WOOD HIPPOOL AND FREEDOR FLOW POWNS, LAG03 VDL= 1.00 THE INCREMENT TOO LANGE-CHAIN IS GI LAG/27 UNIT HTDOGRAPH SERIOR DEPARTOR FLOW. HO.DA HR.NH PERIOR RAIN EVCS LOSS COMP QUENCA HAS .22 .19 .02 1.01 .05 .11.00 .01 .11.00 .01 .11.01 12.05 .145 .22 .19 .02	1165. AT TIME				
SUB-AREA RUNGE COPUTATION CALCULATE INFLOW HTDROGRAPH TO DAM #2 INVOC 10HE TAREA SHAP TRSDE BATTO 15HOW 15AME LOCAL SPEE PAS R6 #12 A2		:	,	1	,
CALCULATE INFIOU HYDROGRAPH TO DAM #2 CALCULATE INFIOU HYDROGRAPH TO DAM #2 SPEC PRS R6 PRS R6 PRS R710 ISMON ISAME LOCAL SPEC PRS R6 PRS R6 PRS R710 ISMON ISAME LOCAL CON 25.70 102.00 130.00 .00 .00 .00 .00 LOSS DATA LPDPT STREE DLTER RIIOL ERAIN STRES RTICK STRIL CHSTL ALERE RIIMPP CUNYE MO = -78.00 WETHESS = -1.00 EFFECT (M = 78.00 TIME INCREMENT TOO LARGE (HHO IS GT LAG/2) THE INCREMENT TOO LARGE (HHO IS GT LAG/2) THE MOSS APIN EVES LOSS ENDOFFRIDE FLOW MO.DA HR.MH PERIOD RAIN EVES LOSS ENDOFPERIOD FLOW 10.01 1.00 .01 1.00 .01 1.00 .01 1.00 .00		:	• • • • • • • • • • • • • • • • • • • •		
CALCULATE INFLOW HYDROGRAPH TO DAM #22 INTO	SUB-AREA RUNOFF COMPUTATION				:
INVEG 10HG TAREA SNAP TREDA TREPE JPRT INAME ISTAGE 1AUTO SPEE PMS RA RESPECTIVE RATIO ISMOD ISMOD ISMOD SAFE LOCAL SPEE PMS RA RESPECTIVE RATIO SAFE RATIO SHOW ISMOD SAFE LOCAL SPEE PMS RA RESPECTIVE RATIO SAFE SAFE SAFE SAFE SAFE SAFE SAFE SAFE	CALCULATE INFLOW HYDROGRAPH TO DAM #2			:	
INVOG 1UHG TAREA SNAP TROOA TRSPE RATIO ISNOW ISANE LOCAL 2 .06 .09 .06 .00 .00 .00 .00 2 SPFE PRS R6 FRST R72 R46 R72 R96 .00 25.70 102.00 120.00 130.00 .00 .00 .00 LOSS DATA LROPT STARR DITKR RTIOL ERAIN STRKS RTIOK STRTL CHSTL ALSHK RTIMP CUNVE NO -78.00 WETHESS1.00 EFFECT CM - 78.00 UNIT HYDROGRAPH DATA TC05 LAG03 TIME INCREMENT TOO LANGE (NHO IS GT LAG/2) TIME INCREMENT TOO LANGE (NHO IS GT LAG/2) WHO DA HRAW PERIOD BAIN EVES CORP Q ROUNS, LAG .22 .19 .02	ICOMP SECON STAPE JPLT 0 C C 0				
SPFE PMS R6 R12 R24 R48 R72 R96 .00 25.70 102.00 120.00 130.00 .00 .00 .00 LOSS DATA LROPT STRKR DLTKR RTIOL ERAIN STRKS RTIOK STRTL CMSTL ALSHX RTIMP 0 .00 .00 4.00 .00 .00 1.00 .00 -1.00 -78.00 CURVE NO = -78.00 WETHESS = -1.00 EFFECT CM = 78.00 THE .CS LAGE .03 RECESSION DATA THE INCREMENT TOO LARGE(NHO IS GT LAG/2) TIME INCREMENT TOO LARGE(NHO IS GT LAG/2) UNIT HYDROGRAPH S END OF PERIOD OF DINATES, TC* .05 HOURS, LAG* .03 VOL= 1.00 0 .00 .01 1.01 12.05 .145 .22 .19 .02	HUDROGRAPH DATA JUHG TAREA SNAP TRSDA TRSPE RATIO 2 .06 .00 .06 1.05 .000	1SAME	OCAL O		
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CFS	256.	30.	12.	12.		3494.		:
	:	6.39	6.21	8.21	•	.21		
2.5		162.30	208.47	208.47	208	25.		
THOUS OF B		19.	10.	7¢.		24.		
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	HYDROGRAPH	I AT STA	3 508	PLAN 1, RT3	RIIO 4	:	:	;
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\$ 5	310.	45.	*		. 7	4193.		!
INCHES	:	7.67	9.83	9.85	- 0	9.85		
张 ()		194.76	256.16	250.16	250	•16		
H DJ SDOHL		22. 28.	29• 36•	36.		29. 36.		
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678	361.	5 S	17.	17.	TOTAL VUI	4891.		
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			101	0 0 1 4 4 8 4 1 4	•			
CFS	PEAK 413.	6-HOUR 60.	24-HOUR 19.	72-HOUR 19.	TOTAL VOL	VOLUME 5590.		
CHS	12.	16.22	13.13	13.13	- 22	150.		: :
		250.48	***	***	*****			

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, ;	AC-FT THOUS CU M		30.	39.	39.		39.	,				
:												
		HYDROGRAPH	AT STA	S FOR P	PLAN 1, ATTO	~	1			+		
; ; ;	CFS	PEAK S16.	6-HOUR 76.	24-HOUR 24.	72-HOUR 24.	TOTAL	VOLUME 6988.	;	i	:	÷	:
	SEN	15.	12.78	16.41	16.47		198.					
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	THOUS CU H		40.	265	\$65		25			,		
		HYBROCRAPH	AT STA	FOR P	PLAN 1. RTIO	•	:		i	1		
	550	PEAK 774.	6-HOUR	24-HOUR 36.	72-HOUR	TOTAL	101UME					
	580	22.	2.	-:	-:		297.					
	2 X X	:	16.984	17.529	625.41		325.41	:	1	:		1
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		hybrogpaph	AT STA	3 508 6	PLAN 1, R110 9	6 02		The second secon		:		i
		PEAK	6-HOUR		72-HOUR	TAL	/OLUME					
		1032.	151.	. 4			13976.					
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	E R		649.19	833.88	~		133.88		!			
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FLOOD HYDROGRAPH PACKAGE - MEC-1	PACKAGE -				PROGRAM H21/02-2V TIME 18:02:25 CASE 84		PROGRA	PROGRAM H21/02-2V	TIME	18:02:25	CASE #4
			1 0	•	000- 000-	000	\$5.	7			
STAGE 77	773.60	174.00	175.00	776.00	777.10	779.00	:				
FL04	00.	2.93	7.00	15.00	50.00	28.00				1	:
CAPACITY	•	÷	•	16.	.24	55.	83.				
ELEVATION=	126.	240.	750.	.092	770.	774. 7	780.			· :	
:	:	773.6	SPETO	PA B P P P P P P P P P P P P P P P P P P	ELEVL • 0	COGL CAREA	A EXPL				:
			;		DAM DATA	OAMEID		:		+	
				1.77.							
CREST LENGTH	:0	180	236.	295.	350.	390.	415.		:	:	
AT OR PELOW ELEVATION	177.1	177.5	778.0	279.0	780.0	781.0	782.0		,		
			3		DAN BREACH DATA	2	19 12 4				
-			10.	.50 73	735.40 1.00	773.60	777.10		:		: : :
PEAK OUTFLOW IS	7. A	7. AT TIME 18	18.42 HOURS			!	1		-	:	:
PEAK OUTFLOW IS	17. A	17. AT TIME 18	18.25 HOURS							1	
PEAK OUTFLOW IS	20. A	20. AT TIME 18	18.33 HOURS					;		:	
BESTH DAM FAILURE AT 15.83 HOURS	AT 15.83	1									
PEAK OUTFLOW IS	1704. A		16.33 HOURS								
BEGIN DAN FAILURE AT 15.67 HOURS	AT 15.67	HOURS									
PEAK OUTFLOW IS	1749. AT TIME		16.19 HOURS							-	
BEGIN DAM FAILURE AT 15.55 HOURS	AT 15.58	HOURS									
PEAK OUTFLOW 15	1801. AT TEME	1	16.10 HOURS								
BEGIN DAM FAILURE AT 15.33 HOURS	AT 15.33	HOURS		1	-	. :					
PEAK OUTFLOW 15	1995. A	1995. AT TIME 15	15.85 HOURS								
SECT SO. ST. TA STUTE AT 14.05 MISSE	AT 14.08	HOURS	:						!		

18:02:25 CASE #4	•					•						ı		•	•	•	•	178.	143.	145.	•	PAGE	18:02:25 CASE #4	166.
-2V 11ME					***************************************		2	IAUTO	46	1 1	- 00		!			1.00	\$507 \$3			.20 .02 .20 .01		DATE	2-2V 11M	. 10. 12.
PROGRAM H21/02				•				T ISTAGE	ISAME LOCAL 0 0	968	ALSHX -00		:			05 Vol	RAIN EXC	. 22 . 22 . 22	22.	22.		PROJECT 9457:	PROGRAM W21/02	
					•••••••			JPRT INAME	AONSI	872 • 00	STRTL CNSTL -1.00 -81.00	81.00		RT10R= 1.00		HOURS, LAG	P.HN PERIOD			2.45 151 2.40 152 2.45 153				144
					•	COMPUTATION		o JPLT	DATA TRSPC RATIO 1.00 .000	DATA R24 R48 130.00 .00	A RT10K	- W3 L3	APH DATA	.00 R	2	, Tc= .00	DD FLOW MO.DA HR			000				
						RUNDFF	1 DAM #4	IECON ITAP	MYDROGRAPH Trsda .09	PRECIP D/ R12 120.00 130	LOSS BAT.	-1.00 EFFE	UNIT HYDROGRAP	RECESSION BRCSN=	15 GT LAG/2	IÐ ORÐINATES. 2.	END-OF-PERIOD COMP Q	000	•••	300				
	.60 HOURS		85 HOURS			SUB-AREA	LOW HYDROGRAPH TO	P 1COMP	TAREA SHAP	PMS R6 25.70 102.00	RT10L ER	DETNESS =	1 = 31	STRTO00	LARGE (NHO	END OF PERIOD	xcs ross	• • •	• • •	9000				
- MEC-1	1796. AT TIME 14.	HOURS	AT TIME 13.85		:		_	ISTAG	3 UH 6	SPFE .00 25	STRKR BLTKR .00	No = -81.00		rs.	TIME INCREMENT TOO	70ROGRAPH 5 182. 42	D RAIN E						- XEC-1	
TEATCHETTE		RE AT 13.33	1805. AT				CALCULATE IN	!	3 t 40 E	i i	L ROPT ST	CURVE			TIME IN	UNIT HYDROGRAP 476. 182.	HR. WW PERIOD			244 254		VEATCH	H PACKAGE -	
BLA A & VEAICHERSER	PEAK OUTFLOW IS	BEGIN DAM FAILURE AT 13.33 HOURS	PEAR GUTFLOW IS					:			:	:				į	FO.DR	1.01	200	929			FLOOD NYPROGRAPH PACKAGE	•
#### ####	PEAK		PEAK	• 7		 •		,	:				*** *	•	; -; - ; •,	•	 			•	•		1100	

FL008 ;	HYDROGRA	AP4 PACKA	9E - NE	:		į	į	!	:		•	ROGBAM	N21102-2V	1 1 NE	18:02:25	CASE #4	j
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